



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,910	09/26/2003	Arun Ramagopal	091353-1	9197

34663 7590 11/17/2006

MICHAEL J. BUCHENHORNER  
8540 S.W. 83 STREET  
MIAMI, FL 33143

EXAMINER
----------

.CLOUD, JOIYA M

ART UNIT	PAPER NUMBER
----------	--------------

2144

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/672,910

Applicant(s)

RAMAGOPAL, ARUN

Examiner

Joiya M. Cloud

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This action is responsive to the application filed on September 26, 2003. Claims 1-35 are pending. Claims 1-35 represent System and method for identifying a network resource.

2. ***Claim Objections***

The application includes improper numbering of claims. There are two claim 20's. Examiner will construe the second claim 20 as claim 36. Appropriate correction required.

**Claim 1** is objected to because of the following informalities: The second paragraph following the preamble ends with incorrect punctuation. The word "using" is followed by a period versus a semi-colon. Appropriate correction is required.

**Claim 21** is objected to because it recites the same exact limitations of claim 36. Appropriate correction is required.

***Claim Rejections - 35 USC 112 2<sup>nd</sup> paragraph***

3. **Claims 14, 15, and 18** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**As per claim 14**, the claim is drawn towards a method wherein the identifying information corresponds to illegal copies of files. The limitation “illegal” is indefinite, as what is legal or illegal is interpretive. Examiner will construe the limitation “illegal” copies of files to mean copies of files intended to be blocked based upon specific criteria (for example, blocking based on specified ip addresses).

**As per claim 15**, the claim is drawn towards a method wherein the identifying information corresponds to prohibited resources. The limitation “prohibited resources” is indefinite as a resource that is “prohibited” is interpretive. Examiner will construe the limitation “prohibited” resources as those resources matching identifying information intended to be blocked for transmission.

**As per claim 18**, the method wherein the identifying information corresponds to suspicious files and wherein a client requesting a file whose identifying information matches an identifying information stored in the database is presented a warning. The limitation “suspicious files” is interpretive. Examiner will construe “suspicious” files to mean those files matching identifying information intended to be blocked for transmission and furthermore flagged in a database as a warning.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2144

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-5, 9, 12, 16-17, 23-27** are rejected under 35 U.S.C. 102(b) as being unpatentable in view of Sarkissian et al. (U.S. Patent No. 6789116 B1, hereinafter Sarkissian).

**As per claim 1**, Sarkissian et al. teaches in an information handling system for identifying network resources comprising packets of data received from a network, a method comprising:

receiving a network resource comprising one or more packets, each packet comprising a header and data portion (**col. 6, lines 52-56**)

parsing the bytes of the one or more packets according to the specific application-level protocol to extract identifying information relating to a specific resource requested (**col.8, lines 30-36 and lines 64-67**);

comparing the extracted information to a list (**data store of records**) of identifying information stored in a real-time database. (**col. 10, lines 38-46, where the comparison is the look up process seen in Figure 3, item 314**) ; and

providing a message indicating that the extracted information matches at least one entry in the real-time database when the comparison is positive (**where the message provided is the final decision of the system after determining the presence of a flow-entry matching a flow in the database of known flows, see Figure 3, item 324. Upon the final recognition state, there is an indication that no more packets are to be examined col. 12, lines 65-67 and col. 13, lines 1-6**).

**As per claims 2**, the method wherein the receiving step comprises receiving a plurality of packets according to the Transmission Control Protocol (**col. 27, lines 66-67**)

**As per claim 3**, the method wherein the receiving step comprises receiving a plurality of packets according to the User Datagram Protocol (**col 28. lines 1-4**).

**As per claim 4**, the method wherein the one or more packets use the hypertext transfer protocol, the scanning step comprises extracting a destination domain name or IP address from a hypertext transfer protocol packet stream and the comparing step comprises comparing the address extracted with addresses stored in the database (**col. 10, lines 5-15**).

**As per claim 5**, the method wherein the one or more packets follow the hypertext transfer protocol and the scanning step further comprises extracting the port, path, and name of the web resource from a hypertext transfer protocol packet stream (**col. 2, lines 56-67**).

**As per claim 9**, the method wherein, the scanning step comprises extracting a filename and path received from a file transfer protocol packet stream (**col. 1, lines 51-62, where the filename and path received is inherently part of the parser and extraction process disclosed by Sarkissian, used to generate the identifying signature (identifying information) key.**)

**As per claim 12**, the method further comprising providing a message announcing a match upon identifying the match (**col. 25, lines 57-67**).

**As per claim 16**, the method wherein the scanning step comprises extracting an IP address (**IP datagrams**) from at least one packet and the comparing step comprises comparing the IP address (**IP datagrams**) with a set of IP addresses stored in the database (**See col. 5, lines 40-50, where**

the scanning and comparing step of claim 16 is substantially the same as claim 1 with the additional limitation of extracting and comparing an IP address, thus IP datagrams includes packets embodied as IP addresses. Refer to <http://www.answers.com/topic/datagram.>)

As per claim 17, the method wherein the identifying information comprises a hash code (col. 10, lines 15-20)

As per claim 23, the method wherein the scanning step further evaluates additional headers and the data portion of the hypertext transfer protocol, such as web forms on an html page, based on the address (col. 8, lines 64-67).

As per claim 24, a system comprising  
a network interface (parser interface) for receiving data packets from a network (col. 24, lines 8-11);  
a processor (Figure 11, item 1108) for extracting identifying information from the data packets and for comparing the extracted identifying information with the identified information stored in a database (figure 11, item 1109) (col.);  
and an output (server announcement) for providing a message stating when a match has been found (col. 25, lines 57-67, Figure 5, item 508).

As per claim 25 the system further comprising a memory (Figure 11, item 1115) for storing the identified information to be compared with the information extracted from the received packets (col. 24, lines 12-19).

As per claim 26, claim 26 is substantially the same as the system of claim 24 and thus is rejected for reasons similar to those in claim 24. Furthermore the limitation of a network gateway device (**Figure 15, item 1502, where the network gateway device is the packet acquisition device.**)

As per claim 27 the local area network further comprising the database (**database of flows, Figure 15, item 324**)

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 6-8** are rejected under 35 U.S.C. 103 (a) as being unpatentable in view of Sarkissian et. al and further in view of Traversat et al. (**US Patent No. 7065579 B2, hereinafter Traversat**).

As per claim 6, Sarkissian discloses the invention substantially as claimed. However Sarkissian does not explicitly disclose the method wherein the scanning step comprises extracting a hash code from a received peer to peer protocol packet stream. However, Traversat teaches the method wherein the scanning step comprises extracting a hash code from a received peer to peer protocol packet stream (**col. 32, lines 1-16**).



It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Sarkissian in view of Traversat to provide the method of a network system to the method of scanning step comprising extracting a hash code from a received peer to peer protocol packet stream. One would be motivated to do so to allow additional means to provide “uniquely identifying content within a peer group.” (**col. 32, lines 10-15**).

**As per claim 7**, Sarkissian-Traversat discloses the method wherein the scanning step comprises extracting additional information needed to identify a specific program from a peer to peer protocol packet stream (**col. 28, lines 47-55**). The same motivation utilized in **claim 6**, applies equally as well to **claim 7**.

**As per claim 8**, Sarkissian-Traversat discloses the method wherein, the scanning step comprises extracting a user agent name (**group name**), additional HTTP extension headers (**peer group identifiers**), or other information (**etc.**) needed to identify a specific program from a peer to peer protocol packet stream (**col. 28, lines 24-55**). The same motivation utilized in **claim 6**, applies equally as well to **claim 8**.

8. **Claims 10, 14, 15, 18, 19, and 22** are rejected under 35 U.S.C. 103 (a) as being unpatentable in view of Sarkissian and further in view of Shetty (**US Patent No. 6772345 B1**)

**As per claims 10**, Sarkissian discloses the invention substantially as claimed. However Sarkissian does not teach the method wherein the scanning step further comprises detecting a transmission control protocol connection to an external simple mail transfer protocol server, and limiting access to the external simple mail transfer protocol server.

However, Shetty teaches the method wherein the scanning step further comprises detecting a transmission control protocol connection (**col. 5, lines 15-20**) to an external simple mail transfer protocol server, and limiting access to the external simple mail transfer protocol server (**col. 2, lines 30-35**) and

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Sarkissian in view of Shetty to provide the method of a network system to an external simple mail transfer protocol server, and limiting access to the external simple mail transfer protocol server and the comparing step upon identifying a match further comprises limiting access by clients to external simple mail transfer protocol servers. One would be motivated to do so to allow additional means to increase access regulation (including regulation of packets according to specific protocols, addresses, URL's, websites or ports) (**Abstract**).

**As per claim 19**, Sarkissian-Shetty teaches the method wherein the comparing step upon identifying a match further comprises limiting access by clients to external simple mail transfer protocol servers (**col. 1, lines 55-65 and col. 2, line 20-35**). The same motivation utilized in **claim 10**, applies equally as well to **claim 19**.

**As per claim 22**, Sarkissian-Shetty teaches the method wherein the receiving step comprises receiving a plurality of packets according to the Simple Mail Transfer Protocol (**col. 3, lines 30-35**) and (**col.5, lines 40-45**). The same motivation utilized in **claim 10** applies equally as well to **claim 22**.

**As per claim 14**, Sarkissian-Shetty teaches the method wherein the identifying information corresponds to illegal copies of files (**spam, col.3, lines 65-67**). The same motivation utilized in **claim 10** applies equally as well to **claim 14**.

As per **claim 15**, Sarkissian-Shetty teaches the method wherein the identifying information corresponds to prohibited resources (**col. 4, lines 1-10, where prohibited resources include blocked ports or URL's**). The same motivation utilized in **claim 10**, applies equally as well to **claim 15**.

As per **claim 18** Sarkissian-Shetty teaches the method wherein the identifying information corresponds to suspicious files (**malwares**) and wherein client requesting a file whose identifying information stored in the database is presented a warning (**col. 4, lines 25-31**).

9. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable in view of Sarkissian et. al and further in view of Fellenstein et al. (**US Patent No. 7032007 B2, hereinafter Fellenstein**)

As per **claim 11**, Sarkissian discloses the invention substantially as claimed except, the method further comprising logging all instant message communication.

However, Fellenstein teaches the method further comprising logging all instant message communication (**col. 6, lines 5-12**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Sarkissian in view of Fellenstein to provide the method of a network system to the method of logging all instant message communication. One would be motivated to do so to allow additional means to "look-up source user identification." Furthermore, logging instant message communication allows the scanning, parsing, and comparing of more identifying information about the receiving packets (**Abstract**).

10. **Claims 13, and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable in view of Sarkissian et al. and further in view of Strentzsch et al. (**US Patent No. 6256671 B1, hereinafter Strentzsch**).

**As per claim 13**, Sarkissian discloses the invention substantially as claimed, except the method wherein, the comparing step, upon identifying a match, further comprises blocking the user from accessing the resource corresponding to the matching identifying information

However Strentzsch teaches the method wherein, the comparing step, upon identifying a match, further comprises blocking the user from accessing the resource corresponding to the matching identifying information (**Abstract**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Sarkissian in view of Strentzsch to provide the method of a network system to the method further comprising blocking the user from accessing the resource corresponding to the matching identifying information. One would be motivated to do so to allow a “beneficial way to provide a more secure way to control access” on the network (**col. 1, lines 45-48**).

**As per claim 21**, Sarkissian discloses the invention substantially as claimed except, the method wherein the blocking step is accomplished by ending client/server communication for a response that contains the matching identifying information.

However Strentzsch teaches the method wherein the blocking step is accomplished by ending client/server communication for a response that contains the matching identifying information (**col. 9, lines 42-53**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Sarkissian in view of Strentzsch to provide the method of a network system to the method wherein the blocking step is accomplished by ending client/server communication for a response that contains the matching identifying information. One would be motivated to do so to allow a more efficient means of blocking, indicating a match. Furthermore, to allow access to be “denied based on a restriction identifying [for example, a host name or a particular IP address] (col. 9, lines 42-53).

11. **Claims 20 and 28-34** are rejected under 35 U.S.C. 103(a) as being unpatentable in view of Sarkissian et al. and further in view of Patterson et al. (**US Patent No. 7093005 B2, hereinafter Patterson**).

**As per claim 20**, Sarkissian teaches all the limitations of claim 20 except the method further comprising using identifying information found by a central server farm comprising specialized search engines and a human staff to populate the database.

However, Patterson teaches the method further comprising using identifying information found by a central server farm comprising specialized search engines (**search box**) and a human staff (**user**) to populate the database (**Abstract**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Sarkissian in view of Patterson to provide the network system of Sarkissian to the method further comprising using identifying information found by a central server farm comprising specialized search engines and a human staff to populate the database. One would be motivated to do so to allow identifying information to be gathered from additional locations such

Art Unit: 2144

as multiple servers within a server farm with the assistance of a human user. Furthermore, server farms function as “data centers” ...that are “configured and brought on-line to carry out useful work virtually instantaneously” (col. 1, lines 42-45).

As per claims 28-35, Sarkissian discloses the invention substantially as claimed except, the local area network further comprising

a router disposed between the network gateway device and a firewall connecting the local area network to a wide area network

a load balancer disposed between the router and a firewall;

a network gateway device disposed between a router and a load ;

a load balancer disposed between the network gateway device and a firewall connecting the local area network to a wide area network ;

a router containing the network gateway device;

a firewall disposed between the router containing the network gateway device and the wide area network;

a firewall containing the network gateway device;

However, Patterson teaches

a router disposed between the network gateway device (**default gateway**) and a firewall connecting the local area network to a wide area network (col. 6, lines 10-21, See Figure 7).

a load balancer disposed between the router (**where the load balancer is also a routing device**) and a firewall (**col. 6, lines 10-21**);

a network gateway device disposed between a router and a load balancer (**default gateway**)

a load balancer disposed between the network gateway device and a firewall connecting the local area network to a wide area network (**col. 6, lines 10-21**);

a router (**col. 6, lines 10-21**) containing the network gateway device;

a firewall disposed between the router containing the network gateway device and the wide area network (**col. 6, lines 10-21**);

a firewall containing the network gateway device (**col. 6, lines 10-21**);

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Sarkissian in view of Patterson to provide the network system of Sarkissian to the local area network of Patterson. One would be motivated to do so to allow optimal use of computing resources through the load balancer, to allow or block traffic in the network system by means of the firewall, and to utilize a network gateway device to route traffic based on definition known to one of ordinary skill in the art.

**As per claim 36**, claim 36 is substantially the same as claim 21 and thus rejected for the same reasons as claim 21.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joiya Cloud whose telephone number is 571-270-1146. The examiner can normally be reached Monday to Friday from on 7:30am-5:00pm.

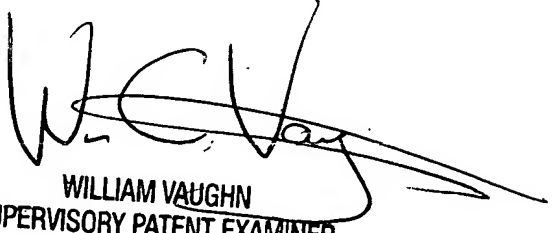
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3922. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*JMC*

**William J. Vaughn**

**Supervisory Patent Examiner**

**October 30, 2006**

  
WILLIAM VAUGHN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100